Expt. No. 08

Expt. Name Analyze the iris dataset and
visualize using heatmap

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Date :

Aim :

Write a python code to visualize the Iris
dataset using a heatmap

Procedure:

1. open a python IDLE/notebook

2. Start by importing the required libraries: 'seaborn'
'pandas' and 'matplotlib.pyplot'.

3. Load the Iris dataset into a Pandas DataFrame.
Ensure the file path is correct.

4. Use Seaborn's 'heatmap' function. Pass the
correction matrix computed from the DataFrame's
numeric columns to this function. Specify 'annot = True'
to display the corelation values within the cells.

5. choose a colormap (eg: 'Summer') to define the
colors for the heatmap

6. Use Matplotlib's `plt.show()' function to
display the heatmap.

code:

```
import seaborn as sns
import pandas as pd
import matplotlib.pyplot as plt

iris = pd.read_csv('/content/iris.csv')

sns.heatmap(iris.corr(numeric_only = True), annote = True,
                    cmap = 'summer')
plt.show().
```

Result:

Thus the iris dataset is analyzed and a
heatmap is created successfully.

Output:

	sepal-length	sepal-width	petal-length	petal-width
sepal-length	1	-0.11	0.87	0.82
sepal-width	-0.11	1	-0.42	-0.36
petal-length	0.87	-0.42	1	0.96
petal-width	0.82	-0.36	0.96	1